Serial No. 10/526,980

2

Docket No. 040116

AMENDMENTS TO THE CLAIMS:

Please cancel claim 8 without prejudice or disclaimer and amend the claims as follows:

1. (Currently Amended) A core type thermal fuse comprising:

a fuse core produced by winding a conductor meltable at a predetermined temperature on an insulating core member continuously provided in the length direction of said conductor; and

an insulating cover covering the outer periphery side of said insulating core member, characterized in that:

said conductor can be broken by expanding said insulating core member at a predetermined temperature and/or by contracting said insulating cover at said predetermined temperature; and

said insulating core member comprises a gas-containing material; and

covering a periphery of a tensile resistant member at the center of said insulating core
member, and.

2. (Previously Presented) The core type thermal fuse as claimed in claim 1, further characterized in that:

said insulating core member has at least one or more protrusions formed continuously or intermittently in the length direction of said conductor on the outer periphery side of said insulating core member.

3. (Previously Presented) The core type thermal fuse as claimed in claim 1, further characterized in that:

said insulating cover has at least one or more protrusions formed continuously or intermittently in the length direction of said conductor on the inner periphery side of said insulating cover.

4. (Previously Presented) The core type thermal fuse as claimed in claim 1, further characterized in that:

a line-shaped or braid-shaped insulator is provided on an inner peripheral side of said

Serial No. 10/526,980

Docket No. 040116

insulating cover; and

said conductor is sandwiched between said insulating core member and said lineshaped or braid-shaped insulator at least partially in the length direction of said conductor.

3

5. (Previously Presented) The core type thermal fuse as claimed in claim 4, further characterized in that:

said line-shaped or braid-shaped insulator has a characteristic of contracting in the length direction of said conductor around a melting temperature of said conductor.

6. (Previously Presented) The core type thermal fuse as claimed in claim 4, further characterized in that:

said line-shaped or braid-shaped insulator has a characteristic of expanding in a radial direction around a melting temperature of said conductor.

7. (Previously Presented) The core type thermal fuse as claimed in claim 1, further characterized in that:

said insulating core member comprises a gas-containing material as a structural element.

- 8. (Canceled)
- 9. (Previously Presented) A sheet type thermal fuse, comprising:

the core type thermal fuse according to claim 1, provided on a flat surface in a serpentine manner; and

means for fixing a layout of said core type thermal fuse.

10. (Previously Presented) The core type thermal fuse as claimed in claim 2, further characterized in that:

said insulating cover has at least one or more protrusions formed continuously or intermittently in the length direction of said conductor on the inner periphery side of said insulating cover.

Serial No. 10/526,980

Docket No. 040116

11. (Previously Presented) The core type thermal fuse as claimed in claim 2, further characterized in that:

4

said insulating core member comprises a gas-containing material as a structural element.

12. (Previously Presented) The core type thermal fuse as claimed in claim 3, further characterized in that:

said insulating core member comprises a gas-containing material as a structural element.

13. (Previously Presented) The core type thermal fuse as claimed in claim 4, further characterized in that:

said insulating core member comprises a gas-containing material in airtight spaces.

14. (Previously Presented) The core type thermal fuse as claimed in claim 5, further characterized in that:

said insulating core member comprises a gas-containing material as a structural element.

15. (Previously Presented) The core type thermal fuse as claimed in claim 6, further characterized in that:

said insulating core member comprises a gas-containing material as a structural element.

16. (Previously Presented) A sheet type thermal fuse, comprising:

the core type thermal fuse according to claim 2, provided on a flat surface in a serpentine manner; and

means for fixing a layout of said core type thermal fuse.

17. (Previously Presented) A sheet type thermal fuse, comprising:

the core type thermal fuse according to claim 3, provided on a flat surface in a serpentine manner; and

Serial No. 10/526,980 Docket No. 040116

means for fixing a layout of said core type thermal fuse.

5

18. (Previously Presented) A sheet type thermal fuse, comprising: the core type thermal fuse according to claim 4, provided on a flat surface in a serpentine manner; and

means for fixing a layout of said core type thermal fuse.

19. (Previously Presented) A sheet type thermal fuse, comprising:

the core type thermal fuse according to claim 5, provided on a flat surface in a serpentine manner; and

means for fixing a layout of said core type thermal fuse.

20. (Previously Presented) A sheet type thermal fuse, comprising:

the core type thermal fuse according to claim 6, provided on a flat surface in a serpentine manner; and

means for fixing a layout of said core type thermal fuse.